IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Roland A. Wood

Title:

0

IMPROVED BOLOMETER OPERA

N USING FAST SCANNING

Docket No.:

H0001512 (256.087US1)

Filed:

March 6, 2001

Examiner:

Shun Lee

Serial No.: 09/800366

Due Date: February 27, 2003

Group Art Unit: 2878

BOX AF

Commissioner for Patents Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

A return postcard.

Amendment and Response Under 37 C.F.R. 1.116 (21 Pages total, including Clean Version of Amended Specification Paragraphs (4 pgs.)).

Clean Version of Pending Claims (7 pgs.).

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: BOX AF, Commissioner for Patents, Washington, D.C. 20231, on this 2 day of January, 2003.

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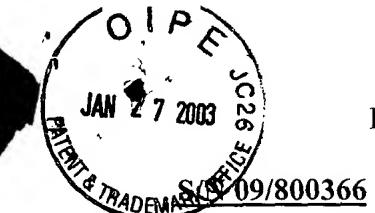
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EXPEDITED PROCEDURE - EXAMINING GROUP 2878

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Applicant:

Serial No.:

Roland A. Wood

Examiner: Shun Lee

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09/800366 March 6, 2001

Docket No.: H0001512 (256.087

PATENT

Title: IMPROVED BOLOMETER OPERATION USING FAST SCANNING

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116

Box AF Commissioner for Patents Washington, D.C. 20231

application as follows:

In response to the final Office Action mailed November 27, 2002, please amend the tion as follows:

IN THE SPECIFICATION

ease make the paragraph substitutions indicated in the appendix entitled Clean Version are of the specific characters. Please make the paragraph substitutions indicated in the appendix entitled Clean Version of Amended Specification Paragraphs. The specific changes incorporated in the substitute paragraphs are shown in the following marked-up versions of the original paragraphs:

The paragraph beginning at page 2, line 24 is amended as follows:

In the prior art, one single bias pulse is applied to each microbolometer in the array in each frame time. Application of a single bias pulse in each frame time can result in a temperature increase in the microbolometer over and above the heating effect of the incident radiation. Since, by necessity, such bias pulses have to be much shorter in time than the frame time, the heating effect is very rapid. Thus, when one bias pulse is applied to each microbolometer in the array in each frame time, the temperature of the microbolometer can initially rise rapidly for a short time equal to the bias pulse duration, and then fall for the reminder of the frame time. The variation in temperature the signal level during each bias pulse due to the temperature rise and fall can typically be many times greater than the signals caused by the incident radiation. The electronic circuits receiving the signals must be designed to receive [possess] a much larger variation in signal [dynamic range] than would be required for the radiation signal alone. This adds to the difficulty in designing and operating such circuits.